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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,550	10/12/2005	Wilhelmus Christianus Maria Lohbeck	TS6317US	6662
23632	7590	07/20/2007	EXAMINER	
SHELL OIL COMPANY			ANDREWS, DAVID L	
P O BOX 2463			ART UNIT	
HOUSTON, TX 772522463			PAPER NUMBER	
			3672	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/552,550

**Applicant(s)**LOHBECK, WILHELMUS  
CHRISTIANUS MARIA**Examiner**

David Andrews

**Art Unit**

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                     |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                         | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/12/2005</u> . | 6) <input type="checkbox"/> Other: ____.                                                |

### **DETAILED ACTION**

The preliminary amendment filed 10/12/2005 has been entered.

#### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 15. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. The limitations describing the slits in claim 2 conflict with the descriptions of the slits in claim 1, leaving the claims indefinite.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard (US 3,605,159) in view of Johnson et al. (US 7,086,476; prior art under 35 USC 102(e), provisional application filed 8/6/2002). Girard discloses a pump plug for flowline operations comprising: a resilient body (10; col. 3., lines 28-30) and a flexible cage (12) having a wear-resistant outer surface (col. 1, lines 50-54) arranged around the resilient body, the flexible cage comprising a tube having a first and second end (22, 24) with a repeating pattern of slits (figures 2, 3, 8, 9 or 11) and wherein the repeating pattern is extended in a axial direction with its mirror image (figures 3, 9 or 11). Girard does not disclose a repeating pattern of two slits closed at different ends and longitudinally overlapping or a pattern of three slits with one closed at both ends and the other two closed on an inside portion and longitudinally aligned. Johnson et al. however disclose a wellbore device with a flexible cage (30) comprising a repeating pattern of slits (figures 2-7) wherein the pattern comprises two slits, a first slit closed at a first end and open at a second end and a second slit closed at the second end and closed at the first

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end wherein the slits overlap each other in a longitudinal direction of the tube (figure 5); and a pattern comprising three slits, wherein the first slit is closed at both ends, wherein the third slit is aligned with the second slit and wherein the second and third slit are open at opposite ends of the tube and closed in the middle (figures 2 or 3). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the plug of Girard with the flexible outer surface patterns of Johnson et al. in order to reduce the axial shortening of the cage when expanding (col. 1, lines 9-12; col. 3, lines 35-39; col. 4, lines 66+) which would prevent spitting or cracking of the device and increase its operational lifetime.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Johnson et al. as applied to claim 1 above, and further in view of Knapp et al. (US 3,725,968). Girard and Johnson et al. disclose all the limitations of this claim except for disclosing the resilient body as a rigid core and a mantle of resilient material around the core. Knapp et al. disclose a plug comprising: a resilient body comprising a rigid core (34; col. 3, lines 31-35) surrounded by a mantle of resilient material (28; col. 2, lines 31-33). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the plugs of Girard and the teachings of Johnson et al. with the rigid core of Knapp et al. in order to provide structural support to prevent unduly deformation or breaking of the plug under high pressure stress (col. 3, lines 31-44).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Andrews whose telephone number is (571) 272-6558. The examiner can normally be reached on Monday-Thursday, 7:30am-5pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
David Bagnell  
Supervisory Patent Examiner  
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